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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,489	02/18/2004	Alex Simmons	60001.0303US01/MS 302496.	3119
7590 12/27/2007				
Christopher J. Leonard Merchant & Gould P.C. P.O. Box 2903 Minneapolis, MN 55402-0903		EXAMINER HASSAN, AURANGZEB		
		ART UNIT 2182		PAPER NUMBER
		MAIL DATE 12/27/2007		DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/781,489

Applicant(s)

SIMMONS ET AL.

Examiner

Aurangzeb Hassan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2007.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 1, 15 and 18 are objected to because of the following informalities: The claims recite in the preamble "automatically switching between computer-enabled input modes" however the Examiner notes that the automatic input mode switching only occurs if the auto switch mode is initiated. The claims necessitate only three **input** modes, **selection-based**, **pen-based**, and **auto switch** wherein each has respective internal *behavioral* modes. In the selection-based and pen-based modes there is **no automatic** switching between computer-enabled input modes.

Appropriate correction/clarification is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 1 – 4, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stein et al. (US Patent Number 5,365,461 hereinafter "Stein") in view of Fitzmaurice et al. (***Tracking Menus*** by George Fitzmaurice, Azam Khan, Robert Pieke, Bill Buxton, Gordon Kurtenbach, hereinafter "Tracking").

4. As per claims 1 and 15, Stein teaches a computer-implemented method of automatically switching between computer-enabled input modes and a computer-readable storage medium, comprising:

providing a selection-based input mode selector, wherein the selection-based input mode selector is configured to receive an input to actuate a selection-based input mode for recognizing inputs from a selection-based input device (switch 18 in “a” **position** is the selector for the selection-based input, figure 1, column 4, lines 7 – 17);

providing a pen-based input mode selector, wherein the pen-based input mode selector is configured to receive an input to actuate a pen-based input mode for recognizing pen inputs from a pen-based input device (switch 18 in “b” **position** is the selector the pen-based input, figure 1, column 4, lines 18 – 26);

providing an auto switch mode selector, wherein the auto switch mode selector is configured to receive an input to actuate an auto switch mode for enabling automatic switching between the selection-based input mode and the pen-based input mode (automatic mode selector chosen by operator 84, figure 4, column 5, lines 61 – 67);

actuating the selection-based (initial) input mode for the selection-based input device (selection-mode chosen 98, figure 4);

receiving a selection of the auto switch mode selector to actuate the auto switch mode (actuating auto mode 84, figure 4, column 5, lines 61 – 67);

while in the auto switch mode, detecting a pen-use input from the pen-based input device (88, figure 4); and

in response to detecting the pen-use input from the pen-based input device, automatically switching from the selection-based input mode to the pen-based input mode without receiving a selection of the pen-based input mode selector (90, figure 4). (As per Claim 15, the selection-based is equivalent to the mouse-based, since the human touch is a mousing device with cursor control, column 1, lines 30 – 32).

Stein does not teach the selectors to be displayed as buttons on a user interface.

Tracking teaches a graphical user interface mode selection displayed as buttons (figure 16).

It would have been obvious to one of ordinary skill in the art to utilize the commonly known graphical buttons on a user interface of Tracking in the above teachings of Stein. One of ordinary skill would be motivated to make such modification in order to enhance rapid switching (pages 71 and 78).

5. Stein as modified by the teachings of Tracking as applied in claim 1 above, as per claim 2, Stein teaches a computer-implemented method comprising detecting a user-input from the selection-based input device; and

in response to detecting a user-input of the selection-based input device, automatically switching from the pen-based input mode back to the selection-based input mode without receiving a selection of the selection-based input mode button (in auto mode rapidly switches between pen and selection-based input mode, column 5, lines 51 – 53, and selection-based input is detected in step 94, figure 4).

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6. Stein as modified by the teachings of Tracking as applied in claim 1 above, as per claim 3, Stein teaches a computer-implemented method prior to actuating the selection-based input mode, actuating the auto switch mode button (auto switch mode selector and be actuated by the user at any point 84, figure 4, column 5, lines 61 – 67).

7. Stein as modified by the teachings of Tracking as applied in claim 1 above, as per claims 4 and 16, Stein teaches a computer-implemented method whereby the selection-based input device is a mousing device (human touch is a mousing device with cursor control, column 1, lines 30 – 32).

8. Claims 5 – 14 and 17 – 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stein in view of Tracking, further in view of Hawkins et al. (US Patent Number 5,133,076).

9. As per claims 5, 14, 17 and 20, Stein and Tracking fail to teach a computer-implemented method whereby the selection-based input device is a keyboard.

In an analogous method Hawkins teaches a method whereby the selection-based input device is a keyboard (keyboard 22, figure 2b).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Stein with the above teachings of Hawkins. One of ordinary skill in the art would have been motivated to make such modification in order to increase peripheral flexibility (column 2, lines 5 – 11).

10. Stein as modified by the teachings of Tracking as applied in claim 1 above, as per claim 6, Stein teaches a selection and pen-based input and the interchangeable functionality therein (column 1, lines 11 – 51), however does not explicitly disclose all the latching functionality in between.

Hawkins teaches a computer-implemented method comprising latching (analog mode, column 3, lines 45 – 47) the selection-based input device so that the selection-based input device behaves as a pen-based input device (allows for pen functionality in drawing, column 3, lines 31 – 39).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the interchangeable functionality of inputs of Stein with the above teachings of Hawkins. One of ordinary skill in the art would be motivated to make such modification in order to increase versatility in its data processing and data input capabilities (column 1, lines 56 – 58)

11. Stein as modified by the teachings of Tracking and Hawkins as applied in claim 6 above, as per claim 7, Hawkins teaches a computer-implemented method whereby while the selection-based input device is latched for behavior as a pen-based input device, using the selection-based input device as a pen-based input device (when in analog mode allows for drawing with features of depth, column 3, lines 40 – 57).

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12. Stein as modified by the teachings of Tracking and Hawkins as applied in claim 6 above, as per claim 8, Hawkins teaches a computer-implemented method further comprising detecting a use-input from the pen-based input device; and

in response to detecting the use-input of the pen-based input device, automatically unlatching the selection-based input device from behaving as a pen-based input device without actuating the pen-based input mode selector (when the stylus touches screen pen is initiated, column 4, lines 60 – 63).

13. Stein as modified by the teachings of Tracking and Hawkins as applied in claim 6 above, as per claim 9, Hawkins teaches a computer-implemented method whereby initiating use of the pen-based input device includes movement of the pen-based input device whereby said pen-based input device is operative to input data when the pen-based input device is engaged with a computer-enabled display screen operative to receive input from the pen-based input device (stylus touches screen, column 4, lines 60 – 63).

14. Stein as modified by the teachings of Tracking and Hawkins as applied in claim 6 above, as per claim 10, Hawkins teaches a computer-implemented method further comprising latching the pen-based input device, by actuating the selector-based input mode selector, so that the pen-based input device behaves as a selection-based input device (by touching the display on the bottom segment 13b pen is latched into the keyboard emulation mode, column 9, lines 49 – 53, figure 6).

15. Stein as modified by the teachings of Tracking and Hawkins as applied in claim 6 above, as per claim 11, Hawkins teaches a computer-implemented method whereby while the pen-based input device is latched for behavior as a selection-based input device, using the pen-based input device as a selection-based input device (pen is used for keyboard emulation, figure 6, stylus may emulate a mouse or enter keystroke data, column 9, lines 49 – 53).

16. Stein as modified by the teachings of Tracking and Hawkins as applied in claim 6 above, as per claim 12, Hawkins teaches a computer-implemented method comprising detecting an input from the selection-based input device; and

in response to detecting the input of the selection-based input device, automatically unlatching the pen-based input device from behaving as a selection-based input device without actuating the selection-based input mode selector (shifts from keyboard emulation mode to actual keyboard interaction, column 12, lines 17 – 53).

17. Stein as modified by the teachings of Tracking as applied in claim 1 above, as per claims 13 and 19, Stein teaches a computer-implemented method whereby detecting an input from the selection-based input device includes moving a mousing device (human touch is a mousing device with cursor control, column 1, lines 30 – 32).

18. As per claim 18, it is recognized by the examiner that claim 18 is a mere combination of claims 1, 2, 6, 8, 10 and 12 and therefore rejected under the same grounds

Response to Arguments

19. Applicant's arguments with respect to claims 1 – 20 have been considered but are moot in view of the new ground(s) of rejection.

20. Applicant also argues, in reference to the claim objections for claims 1, 15 and 18, automatic switching may also occur by latching and unlatching the input devices. As an example the Applicant states a pen may be latched as a mouse device and when a mouse input is received the pen is automatically unlatched and begins functioning as a pen again.

As per the Applicant's arguments, the Examiner respectfully disagrees. There are only three **input modes** necessitated in the claims: selection-based, pen-based, and auto-switch mode. Although the pen-based mode does contain various internal **behavioral** modes, the modes do not constitute **input** modes as claimed. Only after the auto-switch mode is actuated does the claimed invention allow for automatic switching between the pen-based **input mode** and selection-based **input mode**.

Conclusion

21. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

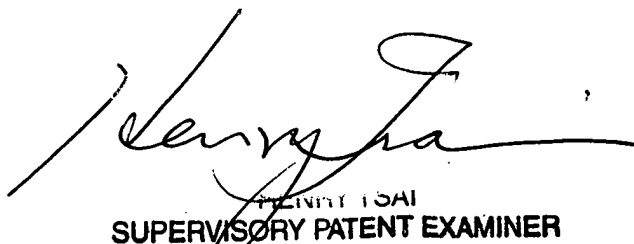
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aurangzeb Hassan whose telephone number is (571)272-8625. The examiner can normally be reached on Monday - Friday 9 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Huynh can be reached on (571)272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AH



HENRY TSAI
SUPERVISORY PATENT EXAMINER
12/26/07